

BIRO, Istvan, a "Rovidhullamu Sport Mestre"

DX-hunting. Radiotechnika 10 no.6:175 Je '60

1. "Radiotechnika" szerkeszto bizottsagi tagja.

43013

B/194/62/000/010/029/084
A154/A126

262190

AUTHOR: Biró, István

TITLE: A pressure difference transmitter

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 10, 1962, 75 - 76, abstract 10-2-150e (Hung. pat., cl. 21g, 29 - 35, no. 147864, December 30, 1960)

TEXT: This patented device for converting a pressure difference into an electric current works on the differential-manometer principle and contains two intercommunicating mercury- and liquid-filled tubes each containing electrical wire-wound resistors. The top parts of the intercommunicating vessels are in the cavity where the pressure is to be measured. Upon a change in pressure, the mercury, which is in contact with the series-connected electrical resistors, moves inside the tubes, thus increasing one resistance and decreasing the other. The transmitter has 3 lead-outs, corresponding to the common point of the series-connected resistors and their two free ends. One terminal of the supply source

Card 1/2

A pressure difference transmitter

S/194/62/000/010/029/084
A154/A126

is connected up to the common point; the other terminal of the supply source and the 2 free ends of the resistors are connected with an indicator by means of a line. The described transmitter can be used as a pressure transmitter or liquid level gauge in automatic control systems.

L.V.

[Abstracter's note: Complete translation]

Card 2/2

BIRO, I.

The Gruneisen constant of metallic Cu-S. Acta phys Hung 16
no.2:181-182 '63.

1. Physikalisches Institut der Universitat fur Technische
Wissenschaften, Budapest; Hochschulartiges Technikum fur
Fernmeldetechnik und Messlehre.

BIRO, Istvan, okleveles gepeszmernok

Regulating the oil burning of boilers. Energia es atom 15 no.10/11:
493-500 O-N '62.

1. Muszeripari Kutato Intezet tudomanyos munkatarsa.

BIRO, Istvan, okleveles gépészmérnök

Burning of liquid fuels. Energia es atom 16 no.8:338-346 Ag '63.

1. Műszeripari Kutató Intézet.

BIRO, Istvan, okleveles gépészmérnök, tudományos munkatárs.

Aerodynamic conditions of oil burners. Energia es atom
17 no.4:177-183 Ap'64

1. Műszeripari Kutatóintézet.

BIRO, Istvan, tudomanyos munkatars

Full automatic control of turbine units. Energia es atom 17 no. 8:
368-371. Ag '64.

1. Instrument Industry Research Institute, Budapest.

STRAUSZ, Imre, dr.; BIRO, Istvan, dr.; KALDOR, Istvan, dr.; TOROK, Eva, dr.

A case of macrocryoglobulinemia with temporarily reversible symptoms. *Borgyogy.vener. szemle* 40 no.1:41-47 F '64.

1. Orvostovábbképző Intézet III. Belgyógyászati Tanszék (tanszékvezető: Strausz Imre dr. egyetemi tanár) és Budapesti Orvostudományi Egyetem Bőr- és Nemikortani Klinika (igazgató: Földvari Ferenc dr. egyetemi tanár).

BIRO, Istvan, dr.; KALDOR, Istvan, dr.; TOROK, Eva, dr.; VERECKEI,
Istvan, dr.; BIRO, Ilona, dr.

Cryoglobulinemia associated with porphyria hepatica chronica
(porphyria cutanea tarda). Orv. hetil. 105. no.8:341-343
23 F'64.

1. OTKI III. Belgyogyaszati Tanszek (tanszekvezeto: Strausz, Imre,
dr.), BOTE Borgyogyaszati Klinika (igazgato: Foldvari, Ferenc,
dr.) es II. Belgyogyaszati Klinika (igazgato: Gomori Pal, dr.).

SCHRODER, Claus, Dipl. Ing., (Bremen); ~~BIRO~~, Istvan; okleveles gépészmér-
nok [translator].

Some questions relating to the formation of SO_2 and SO_3 .
Energia es atom 16 no.9:391-393 3'63

1. Muszeripari Kutató Intézet (for Biro).

BIRO, Janos; DEME, Sandor; FEHER, Istvan; PUSKAS, Laszlo

Surface barrier semiconducting detectors for measuring charged particles. Koz fiz kozl MTA 10 no.3:241-247 '62.

1. Konverta Gyar munkatarsa (for Puskas).

BIRO, Janos

Equipment for methane and argon gas purification and compression.
Kos fiz kozl MTA 11 no.3:239-249 '63.

BIRO, J.

MISKOLCZY-FODOR, F.; BIRO, J.

~~Roentgen diagnosis of otogenic perisinusial abscess.~~ *Roentgen diagnosis of otogenic perisinusial abscess. Magy. radiol.*
3 no.1:21-28 1951. (GML 20:5)

1. Nose, Throat, and Ear Clinic (Director -- Dr. Professor Tibor German), Lorand Eotvos University, Budapest.

BIRO, J.

A new technic of retrograde otological roentgenography. *Magy. radiol.*
5 no.4:164-168 Nov 1953. (GML 25:5)

1. Doctor. 2. Nose, Ear, and Throat Clinic (Director -- Prof. Dr. Gyula
Varga, Candidate Medical Sciences), Budapest Medical University.

BIRO, Janos, dr.

**Radiological picture of the laryngeal chondroma. Magy. radiol.
6 no.3:127-129 July 54.**

**1. Budapesti Orvostudományi Egyetem Pul-orr gégeklínika-janak
közleménye (Igazgató: Varga Gyula dr. egyet. tanár)**

(CHONDROMA

larynx, x-ray)

(LARYNX, neoplasm

chondroma, x-ray)

BIRO, Janos, dr.

X-ray diagnosis of frontal sinus diseases. Orv. hetil. 95 no.
25-26:708-712 24 June 54.

1. A Budapesti Orvostudományi Egyetem Ful-orr-gegeklínikájának
(igazgató: Varga Gyula dr. egyet. tanár) közleménye
(FRONTAL SINUS, radiography)

BIRÓ J.
EXCERPTA MEDICA Sec.2 Vol.9/10 Physiology, etc. Oct56

4727. BIRÓ J., BÜKI B. and KOVÁCH A. Orvostudományi Egyetem Élettani Int., Budapest. *A magasabb idegműködés változásai ischaemiás shock után patkányban. Changes in higher nervous activity after ischaemic shock in rats KISÉRL. ORVOSTUD. 1956, 8/1 (74-84) Graphs 5 Tables 5

Immediately after the ischaemic shock, an inhibition of most of the positive conditioned reflexes was observed. Improvement was gradual and the normal status was restored within 24 hr. The differentiating ability for negative stimuli was increased after shock, the normal status also being restored within 24 hr. After repetition of the shock procedure, the restitution of positive conditioned reflexes occurs earlier than after the first shock. Bálint - Budapest

EXCERPTA MEDICA Sec.18 Vol.1/4 Cardiovascular Apr 57

1216. BIRÓ J., BÜKI B. and KOVÁCH A. G. B. Inst. of Physiol., Univ. Med. Sch., Budapest *Changes of the higher nervous activity following ischaemic shock in the rat* Acta physiol. Acad. Scient. hung. (Budapest) 1956, 10/2-4 (277—289) Graphs 4 Tables 5

On 14 rats, the latency period of a conditioned chain reaction (interval between the first stimulus and the eventual reaction) was studied under normal conditions and after ischaemic tourniquet shock produced by high ligatures on both hind legs. Immediately after the shock the conditioned reflexes were completely inhibited.

1216

CONT

Thereafter the reflexes were restored gradually in the course of 2 days. Differentiation of stimuli was improved after shock. Repetition of the ischaemia in the hind legs decreased the restoration time.
Reichel - Munich (11, 5, 18)

HUNGARY / Virology. Human and Animal Viruses.

E-3

Abs Jour: Ref Zhur-Biol., No 10, 1958, 43064.

Author : Markovits, P., Biro, J.

Inst : Not given.

Title : Experimental Reproduction of Hog Cholera Viruses
in Tissue Cultures. II. Comparative Studies of
Virus Strains "Filaksiya" (Phylaxia) and "Washing-
ton."

Orig Pub: Maguar allatorv. lapja, 1956, 11, No 1012, 357-360.

Abstract: In the cultivation of "phylaxia" strain in cultures of hog embryo tissues (of skin, lings, and spleen), the infection titer up to the 15th passage attained 10^{-4} to 10^{-6} , but diminished subsequently and after the 30th passage infectiousness disappeared. Different media and different periods of cultivation (3, 6, 24, and 72 hours) did not restore infectious-

Card 1/2

4

HUNGARY / Virology. Human and Animal Viruses.
Swine Disease Viruses.

Abs Jour : Ref Zhur - Biol., No 20, 1958, No 90585

Authors : Markovits, P.; Biro, J.

Inst : Hungarian AS

Title : Experimental Studies on the Propagation of Swine-Fever Virus
in Tissue Culture. II. Comparative Studies of the Virus
Strains "Phylaxia" and "Washington".

Orig Pub : Acta veterin. Acad. sci. hung., 1957, 7, No. 3, 283-287.

Abstract : The strains "Phylaxia" (Hungary) and "Washington" (USA) were
cultivated in the hog embryo tissues (skin, lungs, spleen).
In the first 15 applications, the strain "Phylaxia" had a
titer of 10^{-3} - 10^{-6} . Then, the titer fell off and after
30 passages the virus was not detected. The use of diffe-
rent tissues from different nutritional habitats was not re-
flected on the adaptability of the virus. The infectiousity

Card. 1/2

BIRO, J.

HARSING, L.; BIRO, J.; FONYO, A.; DANIEL, F.

Effect of hypertonic solutions on renal blood flow and glomerular filtration rate. Acta physiol. hung. 12 no.4:341-349 1957.

1. Institute of Physiology, Medical University, Budapest.
(HYPERTONIC SOLUTIONS, eff.
on renal blood flow & glomerular filtration rate in dogs.)
(KIDNEYS, physiol.
eff. of hypertonic solutions on renal blood flow &
glomerular filtration rate in dogs.)

HUNGARY/Virology. Human and Animal Viruses. Viral Agents of Diseases E
In Swine.

Abs Jour : Ref Zhur - Biol., No 4, 1959, No 14667

Author : Biro J., Olah P.

Inst : -

Title : A Study of the Virus of the Swine Plague Adapted to the
Organism of the Rabbit.

Orig Pub : Magyar allatorv. lapja, 1957, 12, No 7-9, 206-210.

Abstract : Rabbits reacted to a first administration of the rabbit-
adapted strain of the virus of the swine plague by a brief
elevation of the temperature. They appeared to be immune to
a repeated infection within one month. The greatest num-
ber of viruses (10^{-6} - 10^{-7}) were demonstrated within 72 hours
following the primary infection in the lymphatic nodes and in
the spleen of the rabbits. A vaccine for immunization of
swine was prepared from the spleen. Of 67 immunized swine-31
showed a febrile reaction, one developed the plague and died.

Card : 1/2

- 22 -

HUNGARY/Virology. Human and Animal Viruses. Viral Agents of Diseases E
In Swine

Abs Jour : Ref Zhur - Biol., No 4, 1959, No 14666

Author : Markovits Pal; Biro, Jenő

Inst : -

Title : The Multiplication of the Swine Plague Virus in Tissue Culture. III. A Study of the Virulence of the Swine Plague Virus Grown in Tissue Culture.

Orig Pub : Magyar allatorv. lapja, 1957, 12, No 11, 347-350

Abstract : The virulence of the strain "Phylaxis" decreased following 25-64 passages in a tissue culture (TC). It decreased markedly following 66-133 passages while immunogenicity was preserved at the same time: 98 percent of animals immunized with this virus survived following an effective infection with a virulent strain. A simultaneous injection of the attenuated virus and of a specific antiserum considerably

Card : 1/3

HUNGARY/Virology. Human and Animal Viruses. Viral Agents of Diseases E
In Swine.

Abs Jour : Ref Zhur - Biol., No 4, 1959, No 14666

T C periodical passages through the organism of the swine
are necessary. The "Yen-Sel" strain behaved in the T C
like "Phylaxia". L.S. Segal'.

Card : 3/3

BIRO, J.: BUKI, Bela; DENES, Ivan; KOVACH, ARISZLO

Conditioned reflex method for experiments to be performed on several rats simultaneously. Kiserletes orvostud 9 no. 5-6:545-550 Oct-Dec 58.

1. Budapesti Orvostudományi Egyetem Elettani Intézete.

(REFLEX, CONDITIONED

method for exper. performed on several rats simultaneously
(Hun)

RENYI-VAMOS, Ferenc; BIRO, Janos; GRASZ, Erzsébet; RENYI-VAMOS, Ferencné

Lymph transport of alkaline phosphatase. Kiserletes Orvostudomány
11 no.1:46-50 Feb 59.

1. Budapesti Orvostudományegyetem Urológiai Klinikája.

(LYMPH

alkaline phosphatase content of lymphatic & correspond-
ing blood vessels in dogs, eff. of fasting & various
diets (Hun))

(PHOSPHATASES, determ.
same)

(FASTING, eff.

on alkaline phosphatase content of lymphatic & corre-
sponding blood vessels in dogs (Hun))

(DIETS, eff.
same)

EXCERPTA MEDICA Sec 3 Vol 14/2 Endocrinology Feb 60

408. SOME EFFECTS OF SOUND STIMULI ON THE PITUITARY-ADRENO-CORTICAL SYSTEM - Biró J., Szokolai V. and Kovách A.G.B. Dept. of Urol., Med. Univ.; Paul Heim Hosp. for Child., Budapest - ACTA ENDOCR. (Kbh.) 1959, 31/4 (542-552) Graphs 1 Tables 4

BIRO, Janos; FOVENEYI, Jozsef; SZEKELY, Jozsef; BELA, Arpad

Effect of strong auditory stimulation on the higher nervous activity. Kiserletes Orvostudomany 12 no.1:1-4 F '60..

1. Budapesti Orvostudományi Egyetem Urológiai Klinikája és Elektromechanikai Intézete.

(REFLEX CONDITIONED)
(NOISE off)

BIRO, J.; BELA, A.; FOVINYI, J.; SZEKELY, J.

The role of adrenaline in the changes of the higher nervous activity caused by strong sound stimulus. Acta physiol. hung. 17 no.1:15-22 '60.

1. Department of Urology and Institute of Physiology, Medical University, Budapest.

(EPINEPHRINE pharmacol.)

(REFLEX CONDITIONED pharmacol.)

(SOUND)

BIRO, J.

Action of Rauwolfia preparations on the bladder muscle. Acta
physiol.hung. 17 no.4:465-471 '60.

1. Department of Urology, University Medical School, Budapest.
(RAUWOLFIA pharmacol)
(BLADDER pharmacol)

BIRO, J.; FACHET, J.; KOVACH, A.

On the role of drugs with nervous system action in eosinophilia induced by sound stimulation. Kiserl. orvostud. 13 no. 5:451-456
0 '61.

1. Budapesti Orvostudományi Egyetem Urológiai Klinikája és Elettani
Intézete. (EOSINOPHILIA exper.) (MORPHINE pharmacol.)

BIRO, J.; SZOKOLAI, V.; FACHET, J. with the technical assistance of
Agnes Bodolay-Varga

Effect of the removal of endocrine glands on audiogenic eosinophilia.
Acta physiol. hung. 18 no.4:283-289 '61.

1. Department of Urology and Institute of Physiology, Medical Uni-
versity, Budapest.

(EOSINOPHILIA exper)
(ENDOCRINE GLANDS physiol)

BIRO, J.; RENYI-VAMOS, F.

On lymphatic transport of acid phosphates. Acta physiol. hung. 20
no.1:21-26 '61.

1. Urologische kliniki der medizinischen universitat, Budapest.
(PHOSPHATASES metabolism) (LYMPH chem)

BIRO, J.; CSATA, S.

On the electrolytes in denervated bladder muscle. Acta chir. Acad. Sci.
Hung. 3 no.2/3:121-125 '62.

1. Urologische Klinik (Direktor: Prof. Dr. A. Babics) der Medizinischen
Universität, Budapest.

(BLADDER innerv) (POTASSIUM chem)
(SODIUM chem) (CHLORIDES chem) (WATER chem)

BIRO, J.; NAGY, J.; RENYI-VAMOS, F.

Distribution of radioactive sodium and potassium in the normal and pathological kidney. Acta physiol. acad. sci. hung. 22 no.1:51-57 '62.

1. Urologische Klinik und Physikalisches Institut der Medizinischen
Universität Budapest.
(KIDNEY DISEASES) (SODIUM ISOTOPES)
(POTASSIUM ISOTOPES)

BIRO, J.; SZOKOLAI, Vera; FACHET, J.

Experimental production of acute eosinophilia. Acta physiol. acad.
sci. hung. 22 no.2:163-169 '62.

1. Department of Urology and Institute of Physiology, Medical
University, Budapest.
(EOSINOPHILIA) (LIGHT) (INJECTIONS)

HUNGARY

BIRO, Janos, candidate of medical sciences; Medical University of Budapest,
Urological Clinic (Budapest Orvostudományi Egyetem, Urologiai Klinika).

"The Mechanism of the Development of Acute Eosinophilia."

Budapest, A Magyar Tudományos Akadémia V. Orvosi Tudományok Osztályának
Közleményei, Vol XIV, No 2, 1963, pages 167-176.

Abstract: [Author's Hungarian summary modified] In cases of stimuli of a lesser degree, acute eosinophilia develops in such a way that the ratio of those who react with an increased eosinophile number under control conditions remains the same, but the per cent increase of the eosinophile number rises within this group. Under more effective stimulus, the increase is noted not only in the degree of eosinophilia, but also in the ratio of the animals which exhibit it. During investigation of the relation between the basic value and the changes in the eosinophile number it was found that low basic values show a great increase during stimulus while this increase is less or negative in cases of high basic values. Further observations and literature data indicate that a given situation can inhibit the (probably humoral) effect which decreases the number of eosinophile cells, or can produce this effect, depending on whether the decreasing effect present is strong or insignificant. 14 Western, 5 Hungarian references.

1/1

STRAUB, Gyula; HALASZ, Andras; BIRO, Jozsef

Application of fluorones in analytic chemistry. Pt.4. Veszprem
vegyp egy kozl 4 no.2:123-132 '60

1. Veszpremi Vegyipari Egyetem Analitikai Kemiai Tanszek.

L 14893-66
ACC NR: AT6007403

SOURCE CODE: HU/2505/65/026/00X/0025/0025

AUTHOR: Biro, J.; Gimpl, F.

ORG: Department of Pulmonary Diseases, Department of Urology, Medical University of Budapest (Budapesti Orvostudományi Egyetem, Urológiai és Tudománygyógyászati Tanszerek)

TITLE: Immune diffusion studies of smooth muscle extracts [This paper was presented at the 29th Meeting of the Hungarian Physiological Society held in Szeged from 2 to 4 July 1964]

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 26, Supplement, 1965, 25

TOPIC TAGS: antigen, immunology, protein, myology, rabbit, serum

ABSTRACT: Investigations have been carried out in order to determine whether smooth muscles contain specific protein components different from those in other tissues, mainly in striated muscles. Homogenates of different smooth muscles of the dog were extracted with a 0.154 M KCl solution. The supernatant fluid obtained after centrifugation was examined as a myogen solution, the sediment, extracted with Weber's

Card 1/2

L 14893-66

ACC NR: AT6007403

solution, was examined as a structure protein solution. Extracts were also prepared from striated muscles and parenchymal organs by a similar procedure. Rabbits were immunized with the extracts and the antigens were combined with pure or absorbed immune sera. It was shown that the "anti-smooth muscle myogen" immune serum contains two components while the immune serum against smooth muscle structural protein contains one specific antigenic component. The potential role of these antigenic components in smooth muscle activity has been discussed. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 2/2 *mjs*

L 47424-66 T IJP(c)
ACC NR: AP6034994

SOURCE CODE: HU/0005/65/071/012/0533/0535

AUTHOR: Biro, Janos--Biro, Y.; Feher, Istvan--Fekher, I.; Szabo, Laszlo--Sabo, L.; Szamosi, Gyorgy--Samoshi, G.

ORG: Central Research Institute of Physics, Hungarian Academy of Sciences, Budapest
(Magyar Tudomanyos Akademia, Kozponti Fizikai Kutato Intezet)

TITLE: Low background beta-radiation counter 19

43
B

SOURCE: Magyar kemiai folyoirat, v. 71, no. 12, 1965, 533-535

TOPIC TAGS: beta radiation, radiation counter

ABSTRACT: The measuring installation described is suited for the determination of β -activities of a pCi order of magnitude. A pair of anti-coincidence-shielded GM tubes were used in the apparatus under discussion. By means of suitable shielding and electric circuits it has been achieved that the background of the apparatus was 0.9 ± 0.1 cpm with a sensitivity identical with that of GM-tube measuring installations. The authors thank Bolla Dezso, Knurr Ferenc, and Denes Gyorgyne for construction of the apparatus and assistance with the measurements. Orig. art. has: 6 figures. [JPRS: 34,518]

SUB CODE: 18 / SUBM DATE: 26Apr65 / ORIG REF: 001 / OTH REF: 001

Card 1/1 vlr

0921 1507

HUNGARY

~~REBO, J.~~ OLAH, P., PALATKA, Z.; "Phylaxia" State Serum Institute (director: MOLNAR, J.) (Phylaxia Allami Oltoanyagtermelo Intezet), Budapest.

"Attempt to Adapt the 'SUVAC' Lapinized Hog Cholera Virus Strain to Sheep."
Budapest, Acta Veterinaria Academiae Scientiarum Hungaricae, Vol XVI, No 3,
1966, pages 293-300.

Abstract: [English article, authors' English summary modified] An attempt was made to adapt the SUVAC strain to sheep because of its low virulence, low pathogenicity but good immunogenicity for the pig. The following observations were made. The SUVAC strain was adaptable to sheep and could be propagated therein through several passages. Rabbits inoculated with spleen suspensions from the 7th to 23rd sheep passages developed a febrile reaction (apart from temporary fluctuations). The agent's ability to induce a febrile reaction in sheep tended to increase from the 25th transfer on, while it decreased and finally ceased in the rabbit. From the 38th transfer on, a febrile reaction was consistently induced by the agent in sheep without any other clinical signs. Pigs inoculated with 10^{-1} - 10^{-4} dilutions of spleen suspensions from the 20th to the 30th passage developed immunity to hog cholera. In subsequent passages, the SUVAC strain lost its immunogenicity for the pig. This new biological property of the sheep-adapted virus proved to be constant and could be also maintained in further serial transfers in rabbits. 6 Hungarian, 10 Western references. [Manuscript received 2 Nov 65.]

M. B. ...

Light absorption by polychromates. Arpaal Kiss and
K. Birta. *Acta Univ. Szeged., Chem. et Phys.* 2, 101-5
(1958) (in English). The investigation of extinction
curves of $K_2Cr_2O_7$, $K_2Cr_2O_8$, and CrO_3 in water and in
various concns. of $HClO_4$, HCl , HNO_3 , and H_2SO_4 proved
that the formation of polychromates has a complicated
and specific influence in case of the mentioned acids.
Extinction curves in dil. acid solns. cannot be calcd. on
the basis of other data by assuming simply that there is a
balance between the states of aggregation. In concd.
 H_2SO_4 the formation of heteropolyacids seems probable.
Istvan Fényi

HUNGARIAN TECHNICAL ABSTRACTS
1958, Vol 10, Nr 2

3

6 // ~~K. Hiri, F. Zsuzs~~ ²⁹
~~— az új d. e. elektromotorok —~~ Egyen- és váltakozó-
áramú elektromotorok.
Budapest, 1957. Támasz Kiadó, 445 p., Ft 40.—

BIRO, K. .

Modernization of our methods of viticulture and winegrowing; also, remarks by
P. Csepregi and others. p. 187.
(KOZLEMENYEI. Vol. 12, no. 1/4, 1957, Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, no. 12, Dec. 1957.
Uncl.

BIRO, Karoly

Can Peronospora attack the upper part of grape leaves? Elet
tud 16 no.36:1127 3 S '61.

1. Szoleszeti Kutato Intezet helyettes igazgatoja.

BIRO, K.S.
(843)

A Szegedi Tudományegyetem Belgyógyászati Klinikájáról és Orvosi Vegytani Intézetéből.
A serum K-tartalmanak változása májkivonat hatására Changes in the potassium content of serum under the influence of liver extracts Orvosi Hetilap 1948, 4/16 (79-80)

Liver extracts caused the serum potassium to increase by 26% in normal subjects, 58% in cases of secondary anaemia and 21.7% in pernicious anaemia. It appears that the potassium content of erythrocytes decreases as the cells develop. The change in potassium level occurred within 24 hours, the maximum being reached at 12 to 24 hours, with return to normal after 36 to 48 hours. This effect of liver extracts takes place considerably more rapidly than the reticulocyte crisis. It is assumed that liver extracts contain some principle accelerating maturation of the circulating erythrocytes, during which process part of their potassium content passes into the serum. This occurs in normal and anaemic subjects. The increase in potassium content is proportional to the degree of anaemia, i.e. to the intensity of erythrocyte regeneration.

So: EXCERPTA MEDICA VOLUME 11, Number 2, Section II, February 1949

11-7

1ST AND 2ND ORDERS PROCESSES AND PROPERTIES INDEX

ea

The change of the potassium content of serum under the influence of injections of liver extracts. Sándor Benko and Katalin S. Árkó. (Tudománygyűjtemények Biológiai és Orvosi Oszt. Hung.). *Orvosi Hetilap* 89, 79-80 (1948).—Injections of liver exts. increased the K content of serum 26% in normal persons, 88% in secondary anemia, and 21.7% in pernicious anemia. The max. values were observed 12-24 hrs. after the injection. After 36-48 hrs. K contents return to normal. The increase of K content is not due to the K content of liver exts., since intramuscular injections of even greater quantities of K as KCl sols. did not affect the K level of serum. Liver exts. are supposed to contain substances that accelerate the maturation of red blood corpuscles so that they more quickly excrete a part of their K content. This mechanism does not work well in pernicious anemia. I. Plánfy

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM DOMINY

MATERIALS INDEX

COMMON ELEMENTS

COMMON VARIABLE INDEX

CA

Biro, S.

Adenosinetriphosphate content of the heart of frogs.
Katalin S. Biro and Emma Pettko. *Kisérletes Orvostudomány* 1, 11-13(1949).—From Jan. 7 through March 17, 16 frogs with body wts. of 16-31 g. showed adenosinetriphosphate contents 0.46 mg./g. in the heart, 2.31 in the

gastrocnemius, and 1.4 in the liver. A quinine soln. $1:0 \times 10^4$ showed no impeding effects on the heart. From March 29 to April 7 the concns. were 0.134-0.440 (mean 0.35) in the heart and 2.14-4.30 (mean 2.95) in the gastrocnemius. On May 2 frogs with body wts. 43-85 g. gave values 0.122-0.260 (mean 0.170) in the heart, 2.25-3.20 (mean 2.95) in the gastrocnemius, and 1.29-1.61 (mean 1.43) in the liver. István Fényi

CA Biro, K.S

The interaction between actomyosin and polyphosphates.
 G. Ács, K. S. Biro and F. B. Straub (Univ. Szeged, Hung.).
 Hung. Acad. Physiol. 2, 84-92 (1949) (in English).—Acto-
 myosin reacts with the Mg complex of adenosine triphos-
 phate (ATP), pyrophosphates, inorg. triphosphates, and
 Calgon to form dissociable complexes. The formation of
 these complexes results in the splitting of actomyosin into
 myosin and actin. When actomyosin consists ($\times 10^6$) of various
 KCl at pH 7.0 at 0°, the dissociation constants ($\times 10^6$) of various
 actomyosin complexes in the absence of Mg and in the pres-
 ence of 0.001 M $MgSO_4$, resp.: were: actomyosin-ATP
 3.25 and 2.45, actomyosin triphosphate 23.7 and 3.7, and
 actomyosin-pyrophosphate 31.7 and 14.7. For actomyosin-
 Calgon there was no measurable complex formation in ab-
 sence of Mg, and the dissociation constant was 350.0×10^{-6} with
 Mg. The dissociation constants ($\times 10^6$) of the system actomyo-
 sin-pyrophosphate at 15° were 1200 without Mg or 160 with
 Mg, and at 23° 350 with Mg. The values were detd. from
 viscosity data, since the decrease of viscosity in an actomyo-
 sin soln. on the addition of ATP is due to the dissociation of the
 actomyosin complex. The concn. of myosin was usually
 0.8, and that of actin 0.3 mg./ml. István Finály

c.t.

Treatment of persons suffering from migraine by histamine and antihistamine substances. László Békó (Országos Táradalombiológiai Intézet Koltői Anna Körháza, Budapest). *Országos Lapja és Népegészségügy* 4, 11-13 (1948).—Expts. made on 30 persons showed that subcutaneous injection of 0.01 mg. histamine caused migraine attacks in 25. The attack could be stopped by giving ergotamine tartrate. Sensitivity could be healed by injections of histamine every 2nd day in doses increasing from 0.0001 to 0.01 mg. Further expts. made on 15 people proved that 11 showed lively reactions on giving histamine. These reactions could be stopped either by gynergen or by 200 mg. intravenous or intramuscular injections of antistine. Istvan Finály

BIRO, L.; VOTIN, J.; SZEKELY, A.

Experimental studies on tyrothricin. *Magy. belorv. arch.* 3 no.4:143-150 1950. (CIML 25:5)

1. Doctors. 2. Internal Department (Head Physician -- Prof. Dr. László Biro) of Kutvolgyi-uti State Hospital and Laboratory (Head Physician -- Prof. Dr. Zoltan Horn) of Anna Koltoi State Casualty Hospital.

BIRO, L.; SZEKELY, A.

Intravenous administration of tyrothricin in bacterial infections.
Magy. helyv. arch. 3 no.4:151-161 1950. (GIML 25:5)

1. Doctors. 2. Internal Department (Head Physician -- Prof. Dr. László
Biro), Kutvolgyi-ati State Hospital.

BIRO, L.;SZEKELY, A.

Intravenous tyothricin in the treatment of bacterial infections.
Acta med. hung. 2 no.3-4:481-509 1951. (GLML 23:2)

1. Of the Internal Department of Budapest Municipal Hospital, Kulvolgyi
St.

BIRO, L.

Lowinger, Simon dr. 1902-1951. Magy. belorv. Arch. 4 no.4:145-146 1951.
(CML 21:4)

1. Doctor.

BIRO, L.; SZEKELY, A.; FIALA, E.

Simple method for bacterial sensitivity investigation with durable prefabricated antibiotic filter paper. Orv. hetil., Budap. 92-46:1497-1499 18 Nov. 1951. (CLML 21:3)

1. Doctors. 2. Internal Department (Head Physician — Prof. -Dr. László Biro), Kutvolgyi-uti State Hospital.

BIRO, L.; CSOKA, E.

Therapeutic results with Staphylococcus anatoxin in chronic
pyoderma. *Borgyogy. vener. szemle* 6 no. 5:147-149 Oct 1952.
(GLML 24:1)

1. Dermatological and Venereological Clinic (Director -- Prof.
Dr. Lajos Szodoray), Debrecen University.

BIRO L.

GOTTSEGEN, Gyorgy, dr.; BIRO, László, dr.

Recent investigations on endocarditis lenta. Orv. hetil. 95 no.39:
1068-1070 26 Sept 54.

1. A Fovarosi Istvan Korház III. (foorvos: Gottsengen Gyorgy dr.)
és a Peterfy Sandor-utcai Korház-poliklinika A) Belosztalyanak
(foorvos: Biro László dr.) közleménye.
(ENDOCARDITIS, SUBACUTE BACTERIAL)

BIRO, L.; GOTTSEGEN, Gy.

Subacute bacterial endocarditis; its changed aspects. Acta
med.hung. 7 no.1-2:21-32 1955.

1. Peterfy Sandor Street Hospital and Istvan Hospital, Budapest.
(ENDOCARDITIS, SUBACUTE BACTERIAL, statistics,
incidence, morbidity & mortal.)

CSOKA, Andre, dr.; BIRÓ, László, dr.

Research results on infectious etiology of psoriasis. *Borogygy. vésér.*
szemle 9 no.3:83-88 May 55

1. A Debreceni Orvostudományi Egyetem Bor- és Nemikortani Klinikájának
(igazgató: Dr. Szodoray Lajos egyet. tanár) és Mikrobiológiai
Intézetének (igazgató: Dr. Jeney Andre egyet. tanár) Közleménye.
(PSORIASIS, etiology and pathogenesis
Streptococcal infect., possible role)
(STREPTOCOCCAL INFECTIONS
psoriasis, possible role)

BIRO, L.,dr.,; CSOKONAY, L.,dr.,; NEUWIRTH, M.,dr.,; CSOKA, I.,dr.

Experimental and therapeutic results with a Staphylococcus anatoxin;
I. part. Immunisation studies. *Borogyogy. vener. szemle* 10 no.1:
6-12 Jan 56.

1. A debreceni Orvostudományegyetem Borklinikájának (igazgató:
Szodoray Lajos dr. egyetemi tanár, az orvostudományok doktora)
és Mikrobiológiai Intézetének (igazgató: Helyi Endre dr.
egyetemi tanár, az orvostudományok doktora) közleménye.

(MICROCOCOCCUS PYOGENES

anatoxin vacc., prep. & immun. eff. in man & rabbits
(Hun))

(VACCINES AND VACCINATION

staph. anatoxin vacc., prep. & immun. eff. in man &
rabbits (Hun))

CSOKA, E.; BIRO, L.

Experiments and therapeutic studies with *Micrococcus pyogenes*
anatoxin; II. Therapeutic results. *Borogygy. vener. szemle* 10 no.2:
73-77 March 56

1. A debreceni Orvost. Borklinikájának. (igaz: Szodoray Lajos
egyetemi tanár, az orvostudományok doktora) és Mikrobiológiai
Intézetének (igaz: Jeney Endre egyetemi tanár, az orvostudományok
doktora) közl.

(MICROCOCCUS PYOGENES

anatoxin, ther. in various forms of pyoderma, results (Hun))

(PYODERMA, ther.

Micrococcus pyogenes anatoxin, results in various forms
of pyoderma (Hun))

JENEY, Endre, dr.; CSOKA, Imre, dr.; BIRO, László, dr.

Significance of pallidin reaction in syphilis diagnosis.
Borogy. vener. szemle 10 no.3:118-124 May 56.

1. A debreceni Orvostudományegyetem Mikrobiológiai Intézetének (igazgató: Jeneý, Endre, dr. egyetemi tanár, az orvostudományok doktora) és Bor-és Nemikortani Klinikájának (igazgató: Szodoray, Lajos, dr. egyetemi tanár, az orvostudományok doktora) közleménye.

(SYPHILIS, diag.

pallidin antigen reaction, evaluation (Hun))

JENEY, Endre, dr.; CSOKA, Imre, dr.; BIRO, László, dr.

Role of the lipid fraction of Reiter's spirochaeta in the
pallidin reaction. *Borogygy. vener. szemle* 10 no.4:165-
169 July 56.

1. A Debreceni Orvostud. Egyetem Bor- es Nemikortani Klinika
(Igazgato: dr. Szodoray, Lajos egyetemi tanar, az Orvostudományok
doktora) es a Mikrobiol. Intezet (Igaz.: dr. Jeney, Endre egyetemi
tanar, az Orvostudoman. doktora) kozlemenye.

(SYPHILIS, diag.

pallidin reaction, role of lipid fraction of Reiter's
antigen (Hun))

JENEY, Endre, dr.; BIRO, Laszlo, dr.; CSOKA, Endre, dr.; NEUWIRTH, Miklos, dr.

Can Treponema pallidum be cultivated? Borgyogy. vener. szemle.
10 no.5:212-217 Sept 56.

1. A Debreceni Orvostudomány Egyetem Mikrobiológiai Intézete
(igazgató: Jeneý, Endre, dr. egyetemi tanár, az orvostudományok
doktora) és a Debreceni Orvostudomány Egyetem Bor. és Nemiklinika
(igazgató: Szodoray, Lajos, dr. egyetemi tanár, az orvostudományok
doktor) közleménye.

(TREPONEMA, culture

pallidum, exper. on cultivation with various culture media
(Hun))

(CULTURE MEDIA

for Treponema pallidum, exper. on cultivation (Hun))

BIRO, Laszlo; SOKA, Imre; NEUWIRTH, Miklos

Evaluation of antibiotic sensitivity tests in dermatological patients. *BORGYOGY. vener. szemle* 11 no.2-3:81-86 Apr-June 57.

1. Debreceni Orvostudományi Egyetem Mikrobiológiai Intézete (igazgató: Jeney Endre dr. egyetemi tanár, as Orvostudományok doktora) és Bor- és Nemikortani Intézete (igazgató: Szodoray Lajos dr. egyetemi tanár, as Orvostudományok doktora).

(ANTIBIOTICS, ther. use
fungus dis. of skin, prether. sensitivity tests by
impregnated paper disc method (Hun))

(FUNGUS DISEASES, ther.
skin, prether. antibiotic sensitivity tests by
impregnated paper disc method (Hun))

(SKIN DISEASES, ther.
fungus dis., prether. antibiotic sensitivity tests by

MOLNAR, Gyorgy, Dr.; BIRO, Laszlo, Dr.

Local administration of primycin in the therapy of inflammations of the uterine region. Magy. noorv. lap. 21 no.3:155-160 June 58.

1. A debreceni Orvostudományi Egyetem Szülészeti és Nőgyógyászati Klinikájának (Igazgató: Arvay Sándor dr. egy. tanár) és Mikrobiológiai Intézetének (Igazgató: Jeney Endre dr. egy. tanár) közleménye.

(UTERUS, dis.

inflamm. in uterine region, ther., primycin local admin. (Hun))

(ANTIBIOTICS, ther. use

primycin in inflamm. in uterine region, local admin (Hun))

BIRO LASZLO

LASZLO, Imre, dr.; BIRO, Laszlo, dr.; NEUWIRTH, Miklos, dr.

Testing of bacterial antibiotic sensitivity by impregnated paper disc method. Orv. hetil. 98 no.22:595-597 2 June 57.

1. A Debreceni Orvostudományi Egyetem Gyógyszertani Intézete (igazgató: Valyi Nagy, Tibor, dr. egyet. tanár, az orvostudományok kandidátusa) és a Mikrobiológiai Intézet (igazgató: Valyi Nagy, Tibor, dr. egyet. tanár, az orvostudományok kandidátusa) és a Mikrobiológiai Intézet (igazgató: Jeney, Endre, dr. egyet. tanár, az orvostudományok doktora) közleménye.

(ANTIBIOTICS

bact. sensitivity determ. using impregnated paper discs
(Hun))

BIRO, L.

JENNY, B.; BIRO, L.; NEUWIRTH, M.

Stability of antibiotic resistance. Kiserletes orvostud 9 no.5-6:
481-488 Oct-Dec 58.

1. Debreceni Orvostudományi Egyetem Mikrobiológiai Intézete.
(ANTIBIOTICS, eff.
on bact., stability of resist. (Hun))
(BACTERIA, eff. of drugs on
antibiotics; stability of resist. (Hun))

BIRO, Laszlo; LASZLO, Imre; NEUWIRTH, Miklos

Evaluation of studies on antibiotics resistance performed by paper disk method. Kiserletes orvostud 9 no.5-6:645-654 Oct-Dec 58.

1. Debreceni Orvostudományi Egyetem Mikrobiológiai Intézete és Gyógyszertani Intézete.

(ANTIBIOTICS, eff.

on bact., value of determ. of resist. by antibiograms (Hun))

(BACTERIA, eff. of drugs on

antibiotics, value of determ. of resist. by antibiograms (Hun))

BIRO 
LASZLO, Imre; NEUWIRTH, Miklos; BIRO, László

Determination of the antibiotic content of impregnated paper disks.
Kísérletes orvostud 9 no.5-6:658-660 Oct-Dec 58.

1. Debreceni Orvostudományi Egyetem Gyógyszertani Intézete és
Mikrobiológiai Intézete.
(ANTIBIOTICS, determ.
in antibiograms (Hun))

BIRO, Laszlo, Dr.; GRABER, Hedvig, Dr.

Erythromycin and patients treated with erythromycin. Orv. hetil. 99
no.49:1715-1720 7 Dec 58.

1. A Budapesto Fovaros i Tanacs Peterfy Sandor utcai Korhaz-rendelo
(igazgato: Galocsi Gyorgy dr.) a Belosztalyanak (foorvos: Biro Laszlo
dr. egyet. m. tamar) kozlemenye.
(ERYTHROMYCIN, ther. use
(Hun))

BIRO, Laszlo, dr.; BANYASZ, Tibor, dr.

Co-existing duodenal ulcer and carcinoma of the kidney.
Orv hetil 101 no.23:820-822 5 Ja '60.

1. Fevarosi Peterfy Sander utcai Korbaz-Rendelo, "A" Belosztaly.
(PEPTIC ULCER compl.)
(KIDNEYS neopl.)

BIRO, Laszlo, dr.; GRABER, Hedvig, dr.; SOMOGYI, Gyorgyi dr.; IVAN, Eva, dr.

Observations on antibiotic synergism-antagonism. (Effects of combination of antibiotics on Staphylococcus strains in vitro).
Orv.hetil. 101 no.32:1127-1130 7 Ag '60.

1. Peterfy Sandor u. Korhas Rendelo, "A" Belosztaly es Laboratorium
(ANTIBIOTICS pharmacol)
(STAPHYLOGOCCUS pharmacol)

BIRO, László; GRABER, Hedvig; IVAN, Eva; WEISZ, Karoly

Effect of dexamethasone on sugar absorption. Kiserletes Orvostud.
13 no.1:1-4 Mr '61.

1. Peterfy Sándor utcai Korház Rendelő "A" belosztálya.
(PREDNISOLONE rel opda)
(CARBOHYDRATES metab)

BIRO, László; GRABER, Hedvig; SOMOGYI, Györgyi; IVAN, Eva

Effect of adrenalectomy on the properdin level. Kísérletes orvostud.
13 no.3:310-315 Jé '61.

1. Peterfy Sandor u. Korhas Rendelo "A" belosztalya es Laboratoriuma.

(ADRENALECTOMY exper) (PROPERDIN)

BIRO, Laszlo; BANYASZ, Tibor; B. KOVACS, Maria; BAJOR, Melitta

Effect of phenylethylbiguanide on sugar absorption. Kiserletes orvostud. 13 no.4:442-445 Ag '61.

1. Peterfy S. u. Korhas-Rendelo "A" Belosztaly Laboratoriuma.

(ANTIDIABETICS pharmacol)

BIRO, Laszlo, dr.; SELMEC, Imre, dr.; BANYASZ, Tibor, dr.

Experience with guanethidin (ismelin) in the treatment of patients
with hypertension; Orv. hetil. 102 no.19:894-896 7 My '61.

1. Peterfy Sandor u. Korhaz-Rendele "A" Belesztalya.

(AMIDINES ther) (ANTIHYPERTENSIVE AGENTS ther)

BIRO, László, dr.; IVAN, Eva, dr.; SZECSCNYI-NAGY, László, dr.

Personal observations on carcinoid syndrome. Orv. hetil. 102 no.52:
2472-2474 D '61.

1. Fovarosi Peterffy Sandor utcai Korház, "A" Belosztaly es Koszponti
Laboratorium.

(MALIGNANT CARCINOID SYNDROME case reports)

BIRO, László, dr.; BANYASZ, Tibor, dr.; KALOTAI, János, dr.; BAJOR, Melitta

Effect of Basethyrin on experimental vascular lesions. Orv. hetil.
103 no.25:1162-1165 24 Je '62.

1. Peterfy Sandor utcai Korház "A" Belosztaly es Laboratorium.
(THIOURACIL rel cpds) (CARDIOVASCULAR DISEASES exper)

BIRO, Laszlo; GRABER, Hedvig; IVAN, Eva; SOMOGYI, Gyorgy

Effect of some adrenal cortex hormones on the properdin level.
Kiserl. orvostud. 16 no.4:444-447 Ag '64.

1. Fovarosi Tana: s Peterfy S. ulcai korhaz "A" Belosztalya es
Laboratoriuma.

BIRO, Laszlo, dr.; IVAN, Eva, dr.

Clinical use of phenformin-chloralhydrats. Orv. hetil. 105 no.41:
1947-1950 11 0 '64.

1. Peterffy Sandor u. korhaz, "A" Belosztaly (foorvos: Biro Laszlo
dr.).

BERO, László, dr.; GRABER, Hedvig, dr.; IVAN, Pava, dr.; SZILÁGYI, György,
dr.

Experiments with new semi-synthetic penicillins. Orv. hetil. 106
no.3:61-65 Ja 10 '65

1. Fovarosí Tanács Peterfy S.u.Korház, "A" Belosztály es Kísérleti
laboratorium (foorvos: Birc, László, dr.).

BIRO, Laszlo, dr.

Comparative clinical studies on 2 penicillinase-resistant semisynthetic penicillins (methicillin and oxacillin). Orv. hetil. 106 no.41:1949-1951 10 0 '65.

1. Fov. Tanacs Peterfy Sandor utcai Kozhaz, "A" Belosztaly es Kiserleti Laboratorium (foorvos: Biro, Laszlo, dr.).

ADAM, Janos (Budapest); BIRO, Matyas (Budapest)

Forum of innovators. Unit lap 16 no. 5:30 10 Mr '64.

11a

CA

PROCESSES AND PROPERTIES INDEX

The effect of potassium chloride and adenylypyrophosphoric acid on succinic dehydrogenase and cytochrome oxidase. N. A. Hill and A. Szent-Gyorgyi, Jr. *Hung. Acta Physiol.* 1, 311-14 (1948). -The oxidation of succinic acid by washed muscle involves at least three systems: cytochrome oxidase, the cytochrome system, and succinic dehydrogenase. The first and the last, i.e., the oxygen activator and the hydrogen activator cannot be sepd. from the structure-proteins of the cell. Succinic dehydrogenase activity was not altered by KCl in concns. of 0.015-1.00 M even in presence of adenylypyrophosphoric acid (D). Cytochrome oxidase activity showed a slight max. at 0.05 M, then at higher KCl values some decrease was observable. Adln. of I caused no changes, nor did the adln. together with I of Ca and Mg in concns. of 0.001 M. If, however, this concn. was increased to 0.005 M then the slight max. at 0.05 M KCl disappeared and O consumption was the same as in salt-free medium independently of the concn. of KCl. Succinic oxidase had a strong max. at 0.05 M KCl, this vigorously increased by I adln. I. F.

ABSTRACT METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

Washed muscle Hungarica Acta Physiologica 1948, 1/6 (215-217) Tables 3

Minced rabbit muscle was used as experimental material. The lower the temperature, the lower are the figures of dry weights and the higher the grad of hydration. By shifting the pH of the washing to the alkaline side, the hydration of the muscle is enhanced. The hydration of the washed muscle also depends on how far its ATP content was split at the very moment of the first washing. These findings are quite parallel to the physico-chemical behaviour of actomyosin, the main constituent of the washed muscle fibre.

Geffart - Liège

SO: Physiology, Biochemistry & Pharmacology 2,¹ Jan.-June 1949

CA

The effect of actin and physicochemical changes on the myosin-adenosinetriphosphatase system and on washed muscle. S. A. Békó and A. E. Szent-Györgyi (Univ. Budapest, Hung.). *Hung. Acta Physiol.* 2, 120-33 (1949) (in English).—The drop of viscosity caused by adenosine triphosphate (I) on myosin II was denoted by Szent-Györgyi as 100% activity, and this actomyosin was designated 100%-active actomyosin. After the isolation of actin it was established that the max. drop of viscosity shown by actomyosin prepri. from pure myosin and actin exceeds this value, and about 170% activity is possibly the max. value. In the 170%-active actomyosin the ratio actin:myosin is 2:5. Such an actomyosin is insol. at 20° at pH 7.0 in 0.1 M KCl. When I is added to such pptd. actomyosin in amt. not exceeding 0.007 M, the actomyosin dehydrates strongly and shrinks. This phenomenon is called superpptn. If the KCl concn. is gradually increased, the actomyosin ppt. becomes more and more hydrated and dissolves. On adding I this pptn. will be less marked.

Superpptn. more or less disappears when the actin content is considerably diminished, when the temp. is lowered to 15°, when the KCl concn. of the system is raised above 0.20-0.23 M, when the pH is increased by approx. 1.0 unit, or when the concn. of I is increased to above 0.007 M. The enzyme activity of superpptd. actomyosin is far above that of the myosin it contains. Definite parallelism exists between superpptn. and adenosine triphosphatase (II) activity. If increased amts. of actin were added to myosin, its II activity increased rapidly. The degree of superpptn. of actomyosin was to a certain degree proportional to its actin content. The II activity of myosin was, however, not increased by adding glycogen, fibrinogen, egg albumin, serum globulin, myokinase, cysteine, or boiled actin. The effects of temp., KCl concn., pH, and I concn. on the II activity of actomyosin were studied. Washed muscle behaved similarly to actomyosin, its II enzyme-system being more active in the contracted state than in the relaxed state.

István Finály

"APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205330003-5

APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205330003-5"

BIRD, N. A.

The reaction between actin and bivalent cations. M. BARANY, N. A. Bird, and J. Molnár (Med. Univ., Budapest) *Acta Physiol. Acad. Sci. Hung.* 3, 63-72 (1954) (in German). -- F-actin (I) shows a max. pptn. at pH 7.0 with 0.10-0.12M MgCl₂ due to the binding of Mg²⁺ with I to make the latter isoelec. The I pptd. with Mg²⁺ is sol. in MgCl₂ concns. over 0.3M and can be dissolved in presence of SO₄²⁻, AsO₄³⁻, Fe(CN)₆⁴⁻. The I solubilized by the multivalent anions is polymerized whereas I dissolved in MgCl₂ concns. of over 0.3M is monomeric. KSCN, 0.3M, or OH⁻, pH 10.3, depolymerizes I at lower concns. than do the halide ions. I is also depolymerized by a pos. or neg. charge. G-actin is pptd. with 0.05-0.10M CaCl₂ and the ppt. is not polymerized. Actomyosin dissolved in 0.5M KCl is pptd. by bivalent ions in the presence of adenosinetriphosphate (II), but in the absence of II, the actin component is selectively pptd. A. Dietz

BIRO, H.A., NAGY, B.

Studies on bound adenine nucleotides of the muscle cells. Acta
physiol. hung. Suppl. no.6:75-76 1954.

1. Institut für Zoologische Biochemie der Eötvös Lorán-Universität,
(NUCLEOS, metab.
nucleotides, actin & protein-bound)
(NUCLEOTIDES, Metab.
actin & protein-bound nucleotides in muscles)

HUNGARY/Human and Animal Physiology (Normal and Pathological)
Metabolism. Nitrogen Metabolism.

T-2

Abs Jour : Ref Zhur - Biol., No 16, 1958, 74585

Author : Biro, N.A., Nagy, B.

Inst : Hungarian Academy of Science. (Zoo - Chem. Inst, LORÁND EÖTVÖS UNIV., BUDAPEST, HUNGARY)

Title : Comparative Study of the Connection of the Adeninenucleotide of the Muscle with Structural Proteins.

Orig Pub : Acta physiol. Acad. sci. hung., 1955, 8, No 3-4, 313-320

Abstract : A method was developed for the determination of nucleotide (N) linked to the structural proteins. In the transverse striated and smooth muscles of different animals (rabbits, chickens, frogs, crabs, stags, rainworms, mollusks) a relatively fixed quantity is contained linked to active N (80-180 of easily-hydrolysed P per 1 g of actomyosin). In the brain, liver, kidneys and polymorphic nuclear

Card 1/2

- 12 -

"APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205330003-5

DI/DO, 14:14

APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205330003-5"

"APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205330003-5

APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205330003-5"

BIRO, N.A., MUHLRAD, A.

Studies on the functional role of the myofibril-bound nucleotide.
II. Investigations on the metabolism of bound phosphate fractions
by the use of labelled P. Acta physiol.hung. 18 no.2:95-101 '60.

1. Department of Biochemistry, Institute of Phylogeny and Genetics,
L. Eotvos University, Budapest.

(NUCLEOSIDES AND NUCLEOTIDES metab)

(MUSCLES metab)

(PHOSPHATES metab)

BIRO, N.A.; MÜHLRAD, A.; DOBRONAI, P.

A simple and sensitive method for the estimation of inorganic phosphorus. *Acta physiol. hung.* 18 no.4:247-252 '61.

1. Institute of Phylogeny and Genetics, Biochemistry Group, L. Eotvos University, Budapest, and Richter Pharmaceutical Works, Budapest.

(PHOSPHORUS chem)

BIRO, N. A.; MÜHLRAD, A.

The binding of ca by isolated myofibrils. Acta physiol. hung. 18
no.4:275-278 '61.

1. Institute of Phylogeny and Genetics, Biochemistry Group, L. Eotvos
University, Budapest.

(CALCIUM metab) (MUSCLES metab)